BOOK REVIEWS

Competition and Liberalization in European Gas Markets: A Diversity of Models by Jonathan Stern. (Royal Institute of International Affairs, 1998). Distributed by the Brookings Institution, Washington, DC. 232 pages. ISBN 1-86203-017-0.

With major companies such as Shell expecting their gas volumes to overtake oil early in the new century, any well-researched gas study must be warmly welcomed. This sector of the energy industry still suffers from a lack of good reading. Towering figures, such as Walter Levy or M. A. Adelman, have yet to appear on the European gas parapet. Jonathan Stern would doubtless agree, despite his many writings on gas problems, that neither he nor his latest offering has any such pretension.

The paperback study here reviewed sets itself a narrow, and not greatly sought, focus. The timespan is largely historical, with few forecasts venturing beyond the opening of the next millennium. The philosophical underpinnings—that market forces are bound to dominate the gas future in a different way from its past—are not clearly revealed. The geographical limitations—to the 33 nations of 'Continental Europe'—leave the reader wondering how far the UK, the FSU, Central Asia, and North America are being borne in mind.

For the professional prepared to work within the focus proposed by Stern, his latest study is certainly good value at the quoted price of £15.50 (\$24.80). It traces in detail (Chapter 5) the Byzantine path by which the UK has become the pioneer in breaking out of the traditional monopoly/monopsony structure of the gas industry. Also treated is the strange German weapon of parallel pipelines built to beat back market-leader Ruhrgas. The reasons for the success of The Netherlands' government in overcoming the 'implacable opposition' of Shell and Exxon to the introduction of new market forces are explored.

Stern's most useful work (Chapter 4) covers the evolution of the Brussels bureaucracy from its first timid entry into the gas fray. He leaves no doubt, however, that the European Union's 1997 gas Directive, introduced after a decade of wrangling, is a weak foundation on which to build his hoped-for era of tough competition and low gas prices. Yet he holds to his surprising belief (page 183) that an oil price settling below \$12 per barrel would 'make it very difficult for gas to win additional market share.' In other words, OPEC rather than Brussels may hold the key to the gas future.

The Energy Charter Treaty is also usefully examined. One of Stern's many helpful tables and charts (page 103) reveals the gaping holes in the coverage of an agreement first proposed by Dutch Prime Minister Lubbers in

1990. A key objective of the Treaty is to guarantee unimpeded passage of gas through cross-border pipelines. The absence of Canada and the United States from the list of signatories is surprising but not critical. On the other hand, without Russia and Ukraine, the Treaty is likely to remain, as this study suggests, a 'dead letter.'

The future in Russia (page 158) is dismissed in six pages. This is unfortunate, since the Russian gas monopoly, Gazprom, is by far the largest exporter to Continental Europe. It would be fascinating to learn how Gazprom's barter deals are set up, and how it can survive, so long as some 50 percent of its export invoices remain unpaid. Stern brushes off such questions with the reminder that Gazprom's former chairman was (until the last three changes!) Russia's prime minister.

Other critical questions remain asked but unanswered. If short-term spot contracts are to become, as Stern implies, the order of the day, how are new gas supplies to be financed? From discovery of the field to delivery to the first industrial or domestic customer may call for a 20-year set of commitments. The Britain-Belgium pipeline interconnector, only opened in 1998, required government strong-arming before it could be built.

Even more uncertain, in the minds of those experts who distrust the present European dash to gas, especially for power generation, is the long-term availability of the reserves. In the UK, a relative newcomer to the gas supply industry, official statistics already show proved/probable gas reserves falling, with a life expectancy that has slumped from 24 years to 14 years during the 1990s. If nothing else, this suggests that Continental Europe will become a captive customer for Russian gas in the early half of the 21st century.

Seen in this context, security of supply can no longer be considered (page 191) as 'an excuse for maintaining the status quo.' Austria, Finland, and Hungary would surely see more to it than such an excuse. Stern recognizes (page 200) that the valuation of security of supply is one of the thorniest problems for energy economists.

Fortunately, for a busy reader, this latest Royal Institute study offers references to its other volumes and a most useful index. It also preserves a few irritating slips of the word processor, such as the statement (page 130) that the impact of electricity privatization 'cannot be *underestimated*.' So, I can safely estimate that it was zero?

This reviewer's carping should not be taken as a reason for ignoring Stern's latest addition to the list of recommended reading on such an important subject.

Energy Economics & Finance Dorchester, UK DT2 0DJ GAS TO EUROPE: The Strategies of Four Major Suppliers edited by ROBERT MABRO AND IAN WYBREW-BOND. (Oxford University Press, 1999), 273 pages. ISBN 0-19-730022-7.

Now that the lure of oil has been replaced by the dash for gas, the Oxford Institute for Energy Studies has shrewdly judged that even a pot-boiler on the gas sector will be deeply appreciated and widely read. This new volume, among its many redeeming features, is made up of four careful studies of the largest Europe-directed exporters, written by well-known gas experts. However, only a worried reader (like this reviewer) is able to discover the background of the contributors—by referring to the jacket before opening the book.

The editors set out bravely under the banner of free-market doctrines, liberalization policies, and even privatization ideals. Such has clearly been the environment in which the British gas business has had to work since the first gas discoveries were made in the North Sea. Yet, this did not occur until an American company (Phillips Petroleum—wrongly spelled in the list of acknowledgements) approached the Norwegian authorities in 1962.

As the blow-by-blow descriptions unfold, it becomes questionable whether the British (still less the American) patterns will be followed in continental Europe. Yet the editors conclude (page 271) that we must ask ourselves 'no longer whether the utilities markets will liberalize but when.'

This mindset obviously reflects current thinking among Europe's new international bureaucracy. It no doubt finds favor with the consumer forces in importing countries. However, it is certainly not echoed by the large companies already established in the gas business, who 'perceive market changes more as a threat than an opportunity' (page 18). It is, moreover, entirely new (or non-existent) within governments of the major gas exporters to Europe.

Gas to Europe restricts the scope of its study of these exporters. It selects only four—Algeria, The Netherlands, Norway and Russia—for detailed treatment. It then eliminates interesting smaller contributors, such as Britain and Romania. With its determination to eschew forecasts, it omits detail on possible future suppliers, such as Ireland, Iran, Libya, Kazakhstan, and Turkemnistan. Also omitted are indications of the possible attractions of liquefied natural gas (LNG) exports from Nigeria and Trinidad.

Among the exporters analyzed, Russia is much the most intriguing and mysterious. It is the largest source of gas imports for Europe. Despite payment arrears on more than half its deliveries, it contributes 15 percent of Russia's total foreign exchange earnings. It possesses developed reserves large enough (given further pipeline improvements) to flood the European market. Yet it has been selling annually not much over 100 billion cubic meters (1.8 mb/d oil equivalent) to Europe, compared to over 300 bcm to the domestic market.

To meet deep-rooted customer fears about supply security in Europe, Russia's gas monopoly (Gazprom) has been at pains to set up joint downstream enterprises within European markets. Most farseeing of these has been an effective partnership with Ruhrgas, Germany's largest gas distributor, and avoidance of price-cutting offers to other would-be customers. The marketing thrust is thus cleverly aimed at new customers, such as Turkey, rather than upsetting the apple cart in established European networks.

Ukraine remains, of course, the severest transit threat to future Russian deliveries. The logical response is to build new pipelines into Europe from Russia's gas rich North. The grandiose, Soviet-era plan to build the multiple 56-inch northern pipeline system collapsed with Gorbachev's regime—a collapse that was not nearly so clear-cut as Stern suggests in this new book.

Still carrying the Yamal title, the plan is being revived under the post-communist rulers, but with the hope of being built and financed backwards. This means that it will start in Poland instead of on the Yamal peninsula, and be financed by the transit areas instead of by Gazprom. Hints in the Oxford Institute study that Gazprom (market capitalization \$3.5 billion) should be broken up cast even more doubt on the future of the Yamal monster.

By contrast, the gas puzzles of the other three major exporters look far less important and far less perplexing.

The pioneer role of The Netherlands has been lost in the years following the huge Groningen discovery in July 1959. Author Peebles warns (page 132) that the British experience of liberalization 'does not necessarily provide a reliable guide for The Netherlands.' He also warns against glib use of gas measurements and comparisons, which altogether lack the uniformity of those used in the oil industry. At the same time, true to his own company background, he does not rule out the possibility of full privatization (under Shell) of Dutch distributor Gasunie.

Another interesting suggestion by Peebles is that The Netherlands and Norway could form some kind of joint marketing arrangement for gas. This would fly in the face of all the rules hammered out in Brussels. However, Norway's successful defeat of the attempted coup by the international competition authorities in 1996 has given fresh courage to its leaders in resisting the liberalization drive. The 1999 dismissal of the chief executive and the entire board of Statoil has, moreover, taught that government monopoly a sharp lesson on what to expect if it ignores Oslo's centralization intentions.

Algeria also retains, in the shape of Sonatrach, centralized government control of gas exports. Its overriding concern is to maximize its rents from hydrocarbon production. It sees joint ventures as a key to mustering the \$12 billion of gas investment needed in the last decade of the 20th century. However, it still regards foreign control of the nation's resources as one of the 'unacceptable risks' faced by Sonatrach (page 81).

In summary, this new study leaves room for improvement—for example for clearer maps of the pipeline systems, and a broader focus. At the same time, with selective reading (rather than the cover-to-cover treatment that your reviewer felt necessary) it should enrich the desk of any professional engaged in this key sector of Europe's energy business.

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